ISSN (print) 0093-4666 © 2012. Mycotaxon, Ltd. ISSN (online) 2154-8889

MYCOTAXON

http://dx.doi.org/10.5248/121.345

Volume 121, pp. 345–348 *July–September 2012*

Diplomitoporus dilutabilis belongs to *Cinereomyces* (*Polyporales, Basidiomycota*)

Otto Miettinen

Botanical Museum, PO. Box 7, 00014 University of Helsinki, Finland
Correspondence to: *otto.miettinen@helsinki.fi*

Abstract — The Brazilian polypore *Diplomitoporus dilutabilis* is combined in *Cinereomyces*, and compared with *C. lindbladii*. The species share similar irregular, amyloid, acyanophilous skeletal hyphae that have a wide lumen and dissolve in KOH. A brief description and drawings of the type of *C. dilutabilis* are provided.

Introduction

The genus *Cinereomyces* was described as monotypic (Jülich 1982: 396). Other authors have sought to widen the concept (Niemelä 2005, Spirin 2005) by including *Skeletocutis lenis* (P. Karst.) Niemelä and *S. vulgaris* (Fr.) Niemelä & Y.C. Dai in the genus. My co-workers and I subsequently revised the generic concept, accepting only the type species *Cinereomyces lindbladii* (Berk.) Jülich (Miettinen & Larsson 2011, Miettinen & Rajchenberg 2012).

When describing *D. dilutabilis*, Loguercio-Leite & Wright (1998) noted that the species closely resembles *Cinereomyces lindbladii*. I sought to verify this, and microscopic analysis of the type material from Santa Catarina, Brazil, confirmed that *D. dilutabilis* and *C. lindbladii* are indeed closely related.

Materials & methods

The reader is referred to Miettinen et al. (2006) for details on microscopy. The basic mounting medium used for descriptions and drawings was Cotton Blue.

Taxonomy

Cinereomyces dilutabilis (Log.-Leite & J.E. Wright) Miettinen, **comb. nov.** Pl. 1

MycoBank MB 564956

≡ *Diplomitoporus dilutabilis* Log.-Leite & J.E. Wright, Mycotaxon 68: 48, 1998.

Basidiocarp resupinate, light brownish with yellowish and gray tints, 1–2 mm thick. Consistency brittle cardboard-like when dry, easily cut and disintegrating into small pieces. Pores rather regular, rounded angular, 6–8 per

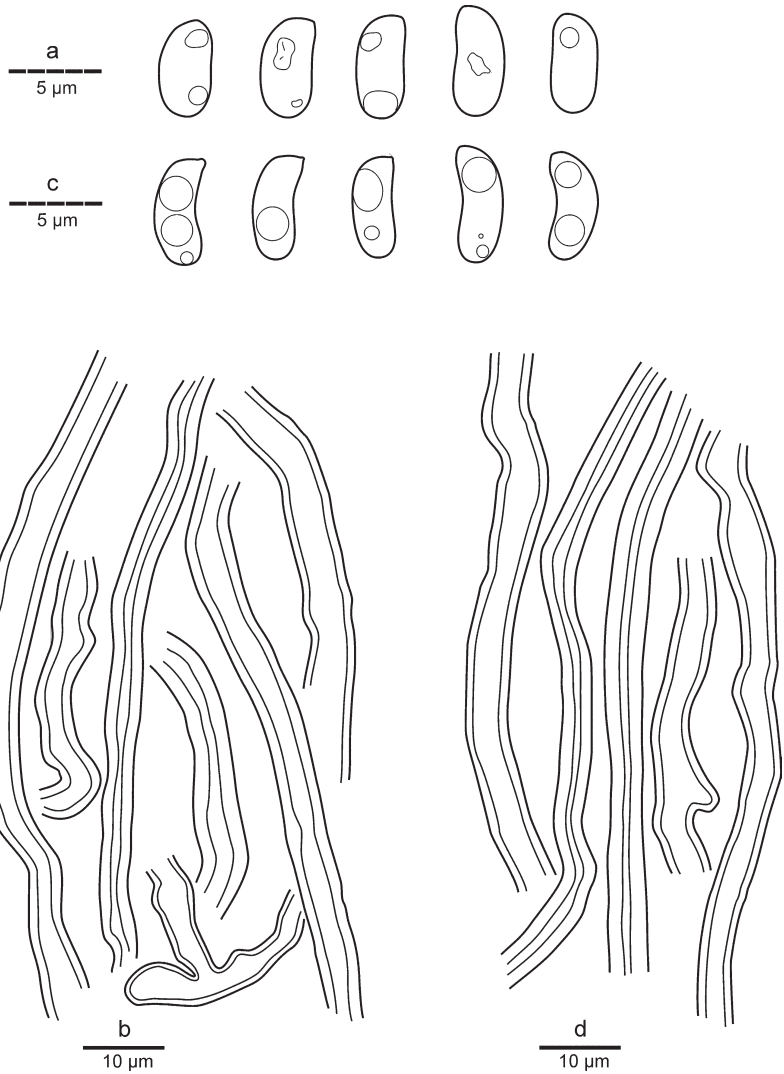

Plate 1. *Cinereomyces dilutabilis* (holotype): a) spores, b) tramal skeletal hyphae. *Cinereomyces lindbladii* (HK 19911 and OM 8647): c) spores, d) tramal skeletal hyphae.

mm, walls of moderate thickness. Subiculum a thin line, concolorous or lighter than tubes.

Hyphal system dimitic throughout, dominated by interwoven skeletal hyphae, tissue rather loose. Generative hyphae thin-walled, 2–3.3 µm in diameter, clamps always present. Subicular skeletal hyphae interwoven, winding,

variable in width, (3.7–)4–5.2(–6.4) µm in diameter, with a distinct lumen ranging between 1/4 to 4/5 of hyphal width, CB–, weakly amyloid in masses, quickly dissolving in KOH. Tramal skeletal hyphae similar as in subiculum, (2.6–)3.7–5(–6.7) µm in diameter. Unusual, narrow (0.6–1.4 µm) arboriform hyphae present in parts of subiculum. Basidia and basidioles thin-walled, short clavate to barrel-shaped, about 10–15×5–7 µm. Basidia with four sterigmata. Cystidioles subulate with a short nape-like neck, not much differentiated.

Basidiospores broadly cylindrical to ellipsoid, curved, thin-walled, smooth, 4.8–5.5(–5.6)×(2.3–)2.4–2.8(–2.9) µm, L = 5.16 µm, W = 2.62 µm, Q' = 1.8–2.2(–2.3), Q = 1.97, n = 31 (holotype). Apiculus small, usually invisible.

Distribution. Described from South Brazil, reported from Costa Rica (Carranza Velázquez & Ruiz-Boyer 2005) and Honduras (Kout & Vlasák 2010). Based on the spore and pore sizes given by Kout & Vlasák (2010), the Honduras find appears to be either *C. lindbladii* or something else.

Specimens examined: ***Cinereomyces dilutabilis***. **BRAZIL**. **Santa Catarina**, Florianópolis, Campus UFSC, Trindade, 24.I.1989, Loguercio-Leite & Furlani 365 (FLOR 10693, holotype); Florianópolis, Costeira do Ribeirão, Sítio do Jambo, 9.V.1995, Foresti, Gerber & Loguercio-Leite s.n. (FLOR 11169).

Cinereomyces lindbladii. **FINLAND**. **Varsinais-Suomi**. Raasepori, Tenhola, on *Pinus sylvestris*, 13.X.2000, Kotiranta 16851 & Saarenoksa (H); **Uusimaa**. Vihti, Poikkipuoliainen E, on *Picea abies*, 28.IV.2004, Miettinen 8458 (H, FLOR); Inkoo, Sommarn, on *Pinus sylvestris*, 24.V.2003, Kotiranta 19911 (H); Helsinki, Viikki, on *Salix caprea*, 17.VI.2008, Miettinen 12696 (H).

Remarks. Loguercio-Leite & Wright (1998) provided microscopic drawings of the type. I did not find good-quality hymenium in the holotype, and hymenial cells in FLOR 11169 are also slightly bloated and collapsed.

Cinereomyces dilutabilis shares similar hyphal structure with *C. lindbladii*. Skeletals are amyloid and acyanophilous, have an easily visible, often wide lumen, and are winding and somewhat irregular with occasional branching (Pl. 1). Air is sometimes trapped inside hyphal lumina in microscopic slides. The hyphae of *C. dilutabilis* appear even more irregular and winding than those of *C. lindbladii*. The skeletals dissolve in KOH in both species. Also spores of both species share the similar curved cylindrical shape, are thin-walled, and have an almost invisible apiculus (Pl. 1). One or a few shiny bodies are typically present in the spores.

Cinereomyces dilutabilis differs from *C. lindbladii* by its more fragile and small-pored basidiomes (pores per mm 6–7 vs. 3–4), and wider spores (width commonly >2.5 µm vs. 1.8–2.4 µm).

Acknowledgments

Tuomo Niemelä (Helsinki) commented on the manuscript. Maria Alice Neves, curator of FLOR, graciously provided material for loan. Peer reviews were provided by Leif Ryvarden (Oslo) and Heikki Kotiranta (Helsinki).

Literature cited

Carranza Velázquez J, Ruiz-Boyer A. 2005. Checklist of polypores of Costa Rica. Revista Mexicana de Micología 20: 45–52.

Jülich W. 1982 ('1981'). Higher taxa of *Basidiomycetes.* Bibliotheca Mycologica 85: 1–485.

Kout J, Vlasák J. 2010. Notes on two species of *Diplomitoporus* (*Basidiomycota, Polyporaceae*) of Central America. Revista Mexicana de Biodiversidad 81: 9–14.

Loguercio-Leite C, Wright JE. 1998. *Diplomitoporus dilutabilis*, a new species of *Polyporaceae* (*Aphyllophorales*) from Santa Catarina Island, Brazil. Mycotaxon 68: 47–51.

Miettinen O, Larsson KH. 2011. *Sidera*, a new genus in *Hymenochaetales* with poroid and hydnoid species. Mycol. Prog. 10: 131–141. http://dx.doi.org/10.1007/s11557-010-0682-5

Miettinen O, Rajchenberg M. 2012. *Obba* and *Sebipora*, new polypore genera related to *Cinereomyces* and *Gelatoporia* (*Polyporales, Basidiomycota*). Mycol. Prog. 11: 131–147. http://dx.doi.org/10.1007/s11557-010-0736-8

Miettinen O, Niemelä T, Spirin W. 2006. Northern *Antrodiella* species: the identity of *A. semisupina*, and type studies of related taxa. Mycotaxon 96: 211–239.

Niemelä T. 2005. Polypores, lignicolous fungi. Norrlinia 13: 1–320. (in Finnish, with English summary)

Spirin W. 2005. Notes on some rare polypores, found in Russia 2. *Junghuhnia vitellina* sp. nova, plus genera *Cinereomyces* and *Skeletocutis*. Karstenia 45: 103–113.